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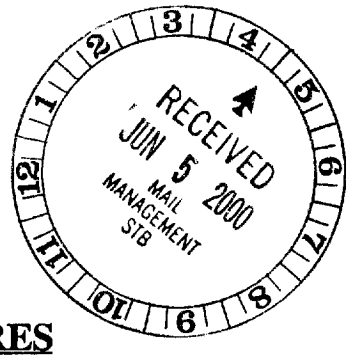

EX PARTE NO. 582 (SUB-NO. 1)
MAJOR RAIL CONSOLIDATION PROCEDURES

REPLY COMMENTS OF PPL ELECTRIC UTILITIES CORPORATION AND PPL MONTANA LLC

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REPLY COMMENTS OF PPL ELECTRIC UTILITIES CORPORATION AND PPL MONTANA LLC

PPL Electric Utilities Corporation and PPL Montana LLC (collectively "PPL") respectfully submit the following reply comments concerning the need for changes in the Board's approach to major rail consolidations, and in related aspects of current rail regulation.

I. SUMMARY OF REPLY COMMENTS

A review of the opening comments in this proceeding reveals widespread support among shippers, smaller railroads and governmental interests for the initiatives announced in the Board's Advance Notice of Proposed Rulemaking. There is tremendous concern about the economic power and lack of accountability of the major railroads today. Unless effective reforms are adopted, the problems of poor service, high rates and lack of customer-

responsiveness will go from bad to worse with further consolidations.

The only dissenting voice comes from the major railroads, and even some of them offer modest support for modest reforms. However, upon close scrutiny, it becomes apparent that the railroads seek to preserve a status quo that has few of the customary safeguards.

The railroads argue that, aside from the occasional minor setback, they deserve praise for creation of the current rail system. The railroads do deserve credit for improving their financial standing (except for self-inflicted wounds) and for some efficiency gains, but their performance still lags far behind that of the trucking industry, in which fierce competition is the rule. If rail service is so good and rail rates are so low, why are so many of the major railroads' customers so insistent on changes? See the two GAO reports.

The railroads argue that any changes in the status quo could reduce their ability and incentive to make capital investments. The logical extension of this argument is that all industries should be unregulated monopolies with antitrust immunity. This proposition has been rejected as to every other industry in America, on the theory that competition is more important than competitors.

In the electric power industry, which is experiencing pervasive new competition, as in many other industries, the wisdom of the public policy favoring competition is being confirmed. The

need to work harder for customers' business is producing new ideas and improved service and customer responsiveness, as management becomes more entrepreneurial. But coal shippers like PPL need the STB's help in bringing similar levels of accountability to the major railroads.

Competition is the key to this process, and the Board's proposal to promote and enhance rail competition is a welcome change from past policies. Competition need not lead to any loss of business for railroads that provide good service at fair prices, but the threat of lost business is needed if the railroads are to improve. This means greater reliance on access remedies and switching on reasonable terms. It also means eliminating anticompetitive constraints on short line railroads and reconsidering policies on bottleneck rates, "2-to-1" shippers and the "one-lump" theory.

Service is also critical, and even some railroads acknowledge that they have failed to keep the promises made to this agency and their customers in past merger proceedings. Current remedies are inadequate, and their inadequacy has led injured shippers to question the fairness of current merger policies and procedures. The Board's proposed reforms are welcome.

The Board's focus on merger procedures is understandable, in view of the scale of the next round of potential merger applications, which may be imminent. However, some remedial measures should be adopted whether or not there are future mergers, to avoid disparate impacts on similar railroads, and to address the

imbalance between major railroads and even large shipper customers that exists today. The Board must also take steps to prevent its reforms from being funded through higher rates on captive shippers. Without such preventive measures, the necessary railroad accountability cannot be achieved.

II. THERE IS OVERWHELMING AGREEMENT ON THE NEED FOR CHANGES

As the result of previous consolidations, line sales, and regulatory determinations, the status quo is highly favorable for the major Class I railroads. Rail-to-rail competition among major railroads has been reduced through mergers and acquisitions. Indeed, two further merger applications could produce a North American rail duopoly, with more than 95% of rail freight in the hands of two huge transcontinental railroads.

In other sectors of the economy, the dangers posed by mergers among giant companies have been mitigated through competition from smaller companies. However, the competition that shortlines and regional railroads might offer to Class I railroads has been thwarted through anticompetitive provisions in line sale contracts, trackage rights agreements, and operating arrangements.

Antitrust enforcement has helped prevent undue concentrations of market power elsewhere in the economy, but the major railroads have little to fear from the antitrust laws. They will not sue each other, and the smaller railroads understand that their survival depends on the continued good will of the Class I

railroads with which they connect. The statute forecloses most shipper antitrust remedies.

ICC and STB regulation is also constrained by the statute, and has been further constrained by decisions in which the Commission and Board have not exercised their remedial authority to its fullest extent. With so little competition in the railroad marketplace, many shippers are captive, but relatively few have any effective recourse against excessive rail rates. As a result, the major railroads have, in their growing captive shipper customer bases, a ready source of revenues to fund further acquisitions. Improved service has taken a back seat to growth through consolidations, but the Board's ability to remedy service problems is limited by statute, by precedent, and by the difficulty of second-guessing railroad management about the operation of their systems.

Under the circumstances, it should come as no surprise that the major Class I railroads like the status quo. It is difficult to think of any industry that is less constrained by competition, law, or regulation. Carriers of other modes face far more competition, more extensive regulation, or both. In other industries formerly regulated as monopolies, deregulation has been accompanied by vigorous new competition, usually through access on non-discriminatory terms to the industries' essential transmission facilities.

The railroads have thus enjoyed 20 years in which to manage their operations essentially as they saw fit. Even their ability

to use revenues from captive shippers to subsidize their services to shippers with competitive alternatives has been effectively unconstrained. Despite this extraordinary freedom of action, the railroads have failed to respond well to the demands of the marketplace.

PPL is aware of the Opening Comments of the Association of American Railroads, in which the AAR recites the usual self-congratulatory litany. As is its custom, the AAR has overstated the evidence, ignoring the fact that more and more of the obligations railroads formerly bore, such as car supply and switching, have been transferred to their customers. And various studies over the years have demonstrated that declining rail rates on a ton-mile basis do not establish that rail rates have really gone down, let alone that there is effective competition among or for Class I railroads. See, e.g., Banks and Fieldston, "Rail Freight Rates in the Post-Staggers Era", 1998, a copy of which is attached hereto.

PPL does not contend that railroad deregulation has been a failure. Individual railroads have performed well for some shippers, and if ICC and STB regulation have sometimes fallen short of preserving the right balance between railroads' and shippers' needs, there have arguably been countervailing social benefits, such as the improved financial health of the major railroads.

Nevertheless, the status quo leaves much to be desired. The consistent refrain in the comments filed in Ex Parte No. 582, and in the opening comments in this proceeding, is that the major

railroads provide inadequate service, charge too much, and have consolidated and restructured with too little thought for the impacts of their actions on their shipper customers and shortline partners.

These charges are levied, by shipper after shipper, at the major railroads as they exist today. No commenting party, other than the major railroads, believes that further mergers will ameliorate these problems. The proposals in the Board's Advance Notice of Proposed Rulemaking are therefore strongly supported in most, if not all, of the opening comments filed in this proceeding by shippers, smaller railroads, and governmental interests.

Notably, this strong and widespread support for changes in the Board's merger policies and procedures, and in related regulation, comes from shippers that support the Board's moratorium and from those that oppose it. There may be disagreement about the best vehicle for changes, but there is no significant disagreement on the need for changes. Indeed, even among the major railroads there is some support for certain reforms.

Most of the parties to this proceeding clearly and strongly support more extensive changes than are palatable to even the most forward-looking of the major railroads. There appears to be a consensus among shippers on the need for the following reforms:

- Stronger action must be taken to hold merging railroads accountable for their promises of improved service and more efficient operations.
- The severe service problems that have resulted from past railroad mergers must be prevented

and/or mitigated through effective remedies, including performance guarantees, compensation and access to other railroads.

- Current regulatory policies, including the bottleneck decision, the "one-lump" theory, and the "2-to-1" rule, have failed to prevent the reduction of competition among major railroads, which now enjoy unprecedented market power.

- The regulatory policies of the past, which the STB has recognized as inadequate, should be replaced by new policies aimed at promoting competition.

- Access remedies such as trackage rights and switching on fair and economic terms should be more readily available, whether or not there are future mergers.

- Contractual and operational barriers to competition from smaller railroads should be eliminated or reduced, whether or not there are future mergers.

- Gateways for all major routings should remain open on reasonable terms.

- Adverse impacts of rail consolidations on the safety of rail operations and on the interests of rail labor should be mitigated.

- Cross-border mergers should not interfere with effective regulation and the enhancement of competition; and

- Railroad mergers can no longer be considered in isolation.

- The necessary reforms must not be funded through higher rates on captive traffic.

III. THE MOST IMPORTANT OF THE NECESSARY CHANGES IS FOR THE BOARD TO ENHANCE AND PROMOTE COMPETITION

Omnibus proceedings like this one cover many issues, and produce comments reflecting different parties' priorities.

However, the opening comments of shippers, smaller railroads and governmental interests consistently emphasized the need for more competition among the major railroads. The Board should focus on this issue in the next phase of this proceeding.

A. More Competition Should Help Prevent and Help Remedy Other Adverse Impacts of Consolidations

Since 1980, the Rail Transportation Policy has recognized the importance of competition. The ICC, and now the Board, have been charged with ensuring "the development and continuation of a sound rail transportation system with effective competition among rail carriers and with other modes, to meet the needs of the public and the national defense." 49 U.S.C. § 10101(4). It is also part of the Rail Transportation Policy to "avoid undue concentrations of market power" among railroads. Section 10101(12). The basic policy initiative of the Staggers Act was to maximize competition and minimize regulation.

Shippers are not alone in questioning whether these policies have been fully implemented in the past. See the Comments of Norfolk Southern at 9: "If anything, the existing policy statement and actual track record of ICC and Board merger decisions over the past two decades have embodied an implicit presumption that every proposed rail consolidation will generate public benefits and that all but the most egregiously anti-competitive combinations receive regulatory approval." Fairness requires an acknowledgement that the breakup of Conrail was designed to increase rail competition in the Northeast, and has done so for some shippers. However,

increasing rail-to-rail competition was not a high priority for the ICC.

PPL therefore commends the Board for acknowledging that the time may have come for it to promote and enhance competition among major railroads. Better late than never. PPL also strongly supports measures to increase rail-to-rail competition, whether or not there are future mergers. Many other commenting parties agree. See the opening comments of Edison Electric Institute, National Industrial Transportation League, "Subscribing Coal Shippers", Alliance for Rail Competition, CURE, Chemical Manufacturers Association, "IMPACT", Alliance of Automobile Manufacturers, DOT, and National Grain and Feed Association, among others. Simply stated, the major railroads must be more accountable for their actions, and we know of no more effective way of achieving this goal than through more competition.

Unfortunately, the major railroads oppose almost all changes aimed at enhancing rail competition. CN says such changes are unnecessary, arguing that "because of the evolution of the Board's merger standards, no major railroad would enter into a merger transaction for the purpose of garnering market power." Comments at 10. No shipper believes this, and the Board itself has questioned whether its "one-lump" theory and refusal to consider access remedies for any shippers other than "2-to-1" shippers reflect too narrow a view of competition. They do.[1/]

[1/] CN Witness Velturro goes even farther, stating: "The Board has safeguards firmly in place under its existing approach to (continued...)

Of course, CN's point may be that with effective rail duopolies on both sides of the Mississippi River, there is no more rail market power to be gained through transcontinental mergers. PPL disputes even this contention, for reasons that demonstrate the bankruptcy of the "one-lump" theory.

Today, shippers at UP-served origins can ship to customers throughout the East, and shippers at CSX-served origins can ship to customers throughout the West, despite these shippers' captivity at origin. If UP and CSX merge, the merged railroad may not totally foreclose eastern shippers' access to BNSF served destinations, or western shippers' access to NS served destinations. However, the combined railroad will have an obvious incentive to favor its own longest hauls and disfavor shipments to destinations it does not serve directly.

Of course, if the merged railroad steers its shippers to preferred routings only through rate reductions, shippers may not complain and the Board may, in any event, lack jurisdiction over the new rates (if they are set below the statutory threshold). However, it is far more likely that the merged railroad would use lower rates on favored routes to encourage new business from competitive shippers, and use higher rates or poorer service over

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[1/](...continued)
rail merger review to ensure that market-power-based profitability is not available to railroads." CN Comments at 74-75. This claim, which appears to deny the existence of differential pricing, is even less credible.

disfavored routes to discourage the use of those routes by captive shippers, notwithstanding the one-lump theory.[2/]

Those who subscribe to the view that railroads will cooperate with more efficient competitors would do well to read Delaware & Hudson Ry. Co. v. Consolidated Rail Corp., 902 F.2d 174 (2d Cir. 1990), and In re Lower Lake Erie Iron Ore Antitrust Litigation, 998 F.2d 1144 (3d Cir. 1993), cert. denied, 510 U.S. 1091 (1994).

To prevent merged railroads from using their expanded market power to create favored and disfavored service territories, the Board's proposal to maintain gateways must be adopted (as even the railroads seem to agree), and switching charges must be reasonable (a shipper concern that only UP and NS acknowledge.)

The Board's proposals on bottleneck issues should also be pursued in the next phase of this proceeding, and UP's variation on the Board's theme (Comments at 11-14) may also warrant further consideration. UP has been admirably candid in acknowledging that agreement from a non-bottleneck railroad to contract rates may be difficult to obtain, and an automatic bottleneck rate quotation could be helpful. However, PPL opposes UP's suggestion that the complainant in a bottleneck rate case be required to establish an absence of effective competition over the entire route. This contention was properly rejected in Metropolitan Edison Co. v. Conrail, 5 I.C.C. 2d 385, 413-14 (1989).

[2/] For a compelling economic criticism of the one-lump theory, see the Verified Statement of Dr. William Tye accompanying the opening comments of the Committee to Improve American Coal Transportation ("IMPACT").

More is needed. There should also be greater use of trackage rights and reciprocal switching remedies. Instead of being used only in "2-to-1" situations, such remedies should also be used in "3-to-2" situations and to remedy upstream or downstream reductions in competition formerly ignored under the one-lump theory.

The Board should not stop there. As explained in PPL's Opening Comments (at 29-32), the "competitive access" regulations at 49 C.F.R. Part 1144 should be revised to eliminate the prerequisite of a showing of anticompetitive conduct by the defendant railroad, whether or not it is merging with another major railroad. This prerequisite has no statutory foundation, and it serves no legitimate purpose other than to nullify the shipper remedies Congress provided in 49 U.S.C. § 11102.

The Board must also pursue the issue of paper and steel barriers to competition by shortline and regional railroads, notwithstanding the objections of the major railroads. Access remedies are meaningless if no other railroad is willing or able to use access when it is provided. In many instances, the nearest potential competitor will be a smaller railroad that is stymied by anticompetitive conditions in a contract or trackage rights agreement with a major railroad. This issue, too, should be pursued not just as a potential remedy for use in future mergers. It should be addressed as a general issue, and reforms should be adopted on an expedited basis, as requested by the smaller railroads. See the American Short Line and Regional Railroad Association's Comments in Ex Parte No. 582 and in this proceeding.

Not only is the enhancement and promotion of rail-to-rail competition desirable as sound public policy, but key shipper complaints concerning service, rates, and commercial disadvantage could be ameliorated if the major railroads were not so insulated from competition. Service problems are less likely when competition is available, and relief in the form of service from an alternative rail carrier will often be the best available remedy for any service problems that do arise.

As detailed in the Verified Statement of Dr. Robert McCormick, filed with the opening comments of the Chemical Manufacturers Association and the American Plastics Council, large scale competition in other industries has benefitted consumers and service providers, even where the industries formerly enjoyed regulatory protections. The STB has a number of means at its disposal to introduce more competition in the railroad industry, in a controlled and measured fashion. Now is the time to employ them. It makes no sense to pursue, past the point of no return, policies that have already made the major railroads too unaccountable for their actions.

B. Competitive Remedies Should Not Be Relegated to Other Proceedings

In their comments, the major railroads attempt to narrow the scope of this proceeding by excluding certain issues, including the Board's suggestion that competition should now be enhanced and promoted. NS goes so far as to argue that such issues "are more appropriately addressed (if at all) by Congress." Comments at 4.

These arguments should be rejected. The Board has a limited amount of time available for the analysis and implementation of reforms before the next merger proceeding begins. Even assuming the moratorium is upheld, the next major merger may be upon us in a little more than a year. Much work needs to be done to get ready, and the issues are complex.

The major railroads argue that this proceeding cannot address all issues, and PPL does not disagree. For example, it would not be appropriate to expand this proceeding to reconsider the maximum reasonable rate methodology for non-coal rate cases adopted in Ex Parte No. 347 (Sub-No.2). That issue may deserve reconsideration, but not here.

However, when the major railroads argue against consideration of access remedies and shortline issues in this proceeding, they are wrong. These issues are clearly relevant to public concerns over major rail consolidations, present and future. The objections of NS, CSX and UP are simply delaying tactics.

BNSF, in contrast, raises an argument that deserves more careful consideration. At page 6 of its Comments, BNSF argues that the Board should not adopt new policies as to industry-wide issues that apply only to merging railroads. As the major U.S. railroad that may expect to be first to seek further consolidation, BNSF is concerned that it may be placed at a competitive disadvantage vis-a-vis UP, CSX, NS and CP. BNSF goes on to cite this concern as grounds for eliminating consideration in this proceeding of access

issues (Comments at 21), bottleneck relief (id. at 25) and shortline issues (id. at 28).

PPL is sympathetic to BNSF's concern about the danger of disparate treatment of major railroads depending on whether and when they seek further consolidation. It does not follow, however, that the Board should eliminate from this proceeding the most important initiatives in its Advance Notice of Proposed Rulemaking. On the contrary, the solution to BNSF's concern is to address all relevant issues in the next phase of Ex Parte No. 582 (Sub-No. 1), and adopt policies and regulations that do not apply solely to future merger partners. No party can legitimately complain of inadequate notice of such a result, in light of the open-ended nature of the Board's ANPR and the opening comments of PPL and other shippers calling for this approach.

As the comments in this proceeding and in Ex Parte No. 582 have demonstrated, shipper concerns about major railroad consolidations extend beyond the confines of 49 C.F.R. Part 1180. If key issues like access remedies, bottleneck relief and anticompetitive constraints on shortlines are not addressed now, the Board and the nation's shippers may soon face the prospect of a North American rail duopoly ill-equipped to restore the needed balance between major railroads and the shippers and smaller railroads that they serve.

IV. THE OBSTRUCTIONISM OF THE MAJOR RAILROADS ON SERVICE ISSUES MUST BE REJECTED

In its ANPR, the Board suggested that merging railroads should live up to their promises of enormous public benefits and few, if any, unmitigated detrimental impacts on competition. Commenting shippers, PPL included, strongly supported this proposal. Unfortunately, the major railroads are far more wedded to the status quo than other parties to this proceeding, despite some variation in the major railroads' positions.

At one extreme are the comments of CSX and NS. Like the other major railroads, CSX calls for more pre-merger scrutiny, recommending an Integration Plan (Comments at 13).[3/] However, this is potentially a step backward in that CSX appears to contemplate extensive lobbying of the STB Staff, to dispose in advance of as many Staff concerns as possible. Then, if things go wrong during the implementation phase, the merger partners could point to the STB Staff's involvement in merger planning as evidence that the implementation problems were unforeseeable.

The STB Staff is quite capable, but the Board's resources are limited, and the implication that more extensive pre-merger scrutiny could forestall most problems may be unrealistic. While PPL does not object to better advance planning than we have seen in past mergers, it would be highly improper for merger partners to

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[3/] See also NS Comments at 19, calling for "Merger Implementation Plans"; and CN Comments at 12, recommending "Service Integration Plans", which are also recommended by BNSF (Comments at 17).

claim a free pass on merger failures based on their consultation with the STB Staff, no matter how extensive.

Even more objectionable, however, are the arguments of CSX and NS against any increased accountability on the part of major merging railroads when things go wrong. See, e.g., CSX Comments at 18-20. Shippers experiencing service disruptions do not want to hear about Integration Plans or Merger Implementation Plans and consultation with the STB Staff. They want fast remedial action and/or compensation for their economic injury.

NS acknowledges (Comments at 20) that filing additional plans will not guarantee success. Unfortunately, it offers no remedy beyond making the remarkable claim that the "marketplace is the best guarantor of adequate service" (Comments at 21). If there is anything that past experience has established beyond any doubt, it is that the "marketplace" is not a reliable guarantor of adequate service.

In the past, merging railroads experiencing service problems have rarely, if ever, been fully answerable in damages to <u>any</u> of their shipper customers. Many small and captive customers lack leverage in the "marketplace" to get their claims considered, let alone paid. Market dominant railroads, or railroads in a position to dictate terms of service (which includes all of today's major railroads as to many of their customers), can simply refuse to enter contracts, or refuse to enter contracts with performance guarantees or specified service levels. On those unusual occasions when liquidated damages have been negotiated, they have fallen far

short of making shippers whole in the face of a disaster like the UP "meltdown."

The opening comments of shippers are hardly filled with statements praising CSX, NS, or UP for the expeditious and fair processing of damage claims. On the contrary, numerous shippers complain about refusals to pay, and delays in processing claims. These statements belie NS's contention that the "economic and commercial pain resulting from the adverse consequences of a merger gone bad is a more than adequate deterrent to reasonably avoidable service problems." Comments at 22.

Although both CSX and NS assert that the Board should "raise the bar" for future mergers (CSX at 7; NS at 12), neither of the major eastern railroads makes any constructive proposals. Both railroads oppose any change as to "3-to-2" shippers, or the one-lump theory, or bottleneck issues, or relations between Class I and smaller railroads. The only forms of enhanced competition that meet with the approval of CSX and NS are voluntary agreements by Class I railroads themselves, and shipper build-outs (which are expensive and duplicative of existing facilities). The conclusion is inescapable that CSX and NS merely want to preserve the status quo.

NS offers "one important exception" to its resistance to all of the Board's proposals. It likes the idea that mergers should be disapproved if benefits could be achieved through alliances short of mergers, including "inter-carrier marketing and operating agreements." While not objectionable, this proposal is self-

serving, in that it creates a new roadblock for future mergers and may effectively extend the Board's moratorium. This proposal also fails to address shippers' concerns about benefits that do not materialize, and adverse impacts that do.

To their credit, BN and UP adopt a somewhat more enlightened approach, expressing support for stronger remedial action to deal with merger-related problems. For example, UP calls on the Board "to condition mergers in the public interest by establishing an expedited procedure for customers to obtain either temporary substitute service or recovery of substitute transportation costs" (Comments at 6). UP goes on (id. at 6-7) to propose the use of detailed records of pre and post-merger performance, to permit accurate quantification of the extent to which mergers produce better or worse service. PPL made a similar proposal in its opening comments (at 13-15).

UP does not go far enough. Its proposed new regulation would allow merging railroads to avoid remedial action under Board regulations unless they reduced a shipper's service by more than 50% for more than 120 consecutive days. This is too high a threshold for relief, given the likelihood that even the worst merged railroads will be able to hit the 50% target once every three months. However, UP's acknowledgement of the need for improved remedies is a step in the right direction, and this concept should be pursued in the next phase of this proceeding.

BNSF and CN also acknowledge the need to go beyond integration or implementation plans, and provide for service guarantees. BNSF

concedes that the Board should "determine whether they are likely to be effective and in the public interest" (Comments at 18). However, both BNSF and CN argue that service guarantees should be the subject of individual negotiations rather than specified in advance.

Because shippers' needs and priorities vary, there is some merit to the idea of flexible service guarantees, but it is not clear why their presence and degree should turn on individual shippers' bargaining leverage. When merging railroads project service benefits, or adopt measures to mitigate detrimental impacts on service, they should be held accountable for their promises regardless of whether the shipper experiencing less than the projected benefits or more than the projected detriments is large or small, captive or competitive.

There is not now (and has never been) any reason to relieve major railroads from the consequences of their own errors in planning or implementing consolidations. Why then should merged railroads be able to provide service guarantees only when they want to, or only for shippers with leverage? What justification is there for allowing railroads to offer service guarantees on a "take it or leave it" basis, when the fundamental test for Board approval of a merger is that it will produce real public benefits after mitigation of adverse impacts?

The guiding principle for service guarantees should be that all shippers are entitled to be compensated for the failure of merging railroads to deliver the promised benefits and mitigation

measures. Only if such a principle is adopted will it make sense to allow major railroads to negotiate individualized service guarantees, because only then will shippers be in a position to obtain meaningful guarantees.

V. CAPTIVE SHIPPERS MUST NOT PAY FOR RAILROADS' MISTAKES

PPL has not attempted to rebut every argument by the major railroads against reform of the Board's policies and procedures rail consolidations. We leave to others a detailed discussion of labor issues and cross-border issues, important as those are. However, PPL respectfully reiterates in its reply comments the need for the Board to address in the next phase of this proceeding one additional issue. And that is the vulnerability of captive shippers to rate increases when consolidations lead to service problems.

This issue is analogous to the need for competition. Ideally, exposing major railroads to competition, and requiring them to bear the costs of their own poor planning and execution of consolidations will lead to more intensive efforts on the part of the railroads to provide good service at reasonable prices, to realize efficiency gains, and to avoid or minimize adverse impacts. When companies are insulated against the consequences of their errors, they may exercise less care in avoiding errors, or may undertake riskier ventures.

Fairness is also a factor. Captive shipper rail rates are already at an average level far in excess of the jurisdictional

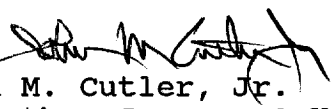
threshold. To raise them even higher to cover the mistakes of rail management adds insult to injury. Captive shippers are generally less able to avoid service problems than shippers who can simply divert their freight to another railroad or mode of transportation. Having borne the brunt of problems ranging from glitches to meltdowns, captive shippers should not then see their rates increased to cover the railroads' remedial costs.

Other agencies, including FERC and state public service commissions, prevent such inequitable outcomes through rate freezes. The Board could impose such a condition in a merger. Alternatively, it could take remedial action through its monitoring authority over the offending railroad's jurisdictional threshold and revenue adequacy analyses. This issue must be pursued in the next phase of this proceeding.

VI. CONCLUSION

For the reasons set forth above and in PPL's opening comments, the Board should continue to pursue the reforms suggested in its Advance Notice of Proposed Rulemaking, and should expand this proceeding to explore the full possibilities of access and switching remedies under 49 U.S.C. § 11102, shortline railroad issues, and protection of captive shipper rates when major railroad mergers are not implemented smoothly.

Respectfully submitted,



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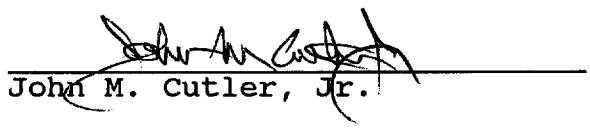
CERTIFICATE OF SERVICE

I hereby certify that I have caused a copy of the foregoing pleading to be served on all parties of record by first-class mail, postage prepaid, this 5th day of June, 2000.



John M. Cutler, Jr.

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Rail Freight Rates In The Post-Staggers Era

R.L. Banks & Associates, Inc. and Fieldston Company, Inc.
April, 1998

In the recent past, the Association of American Railroads (AAR) and Surface Transportation Board (STB) have been claiming that rail freight rates have fallen drastically since the passage of the Staggers Act in 1980. Breaking from the generally understood concept of a "rate," these entities assert that the post-1980 decline in *revenue per ton-mile* is evidence of the unqualified success of the Staggers Act in benefiting both railroads and the shipping public. This is misleading and wrong.

Other AAR data contradicts the use of revenue per ton-mile as a rate surrogate. Prior to 1989 the AAR actually computed a real freight rate index. Comparing revenue per ton-mile to the AAR Freight Rate Index shows that revenue per ton-mile overstates the decline in rates by over 300 percent; U.S. Department of Commerce Data shows that this discrepancy between rates and revenue per ton-mile has continued to this day - if not worsened.

Declining revenue per ton-mile is a trend that began decades before Staggers, and is certainly not a phenomenon that can or should be attributed to the Staggers Act. Revenue per ton-mile is driven by a complex set of factors, such as length of haul, commodity mix, shipment size, etc., which can, in combination, produce reductions in revenue per ton-mile even when the freight rate structure is otherwise unchanged or even rising.

Much of the decline in revenue per ton-mile is a mathematical illusion. Railroad traffic has undergone dramatic structural changes since the passage of Staggers. Unit trains are far more widely used and traffic growth in long-haul corridors has exploded. But unit trains have always had lower costs and revenues per ton-mile than other trains, and shipments moving longer distances generate lower costs and revenues

per ton-mile than do short distance movements. The consequences of growing the "cheaper" varieties of freight much faster is that average revenue per ton-mile has declined -- it would have declined irrespective of changes in rates. Masking structural changes in the rail industry by employing revenue per ton-mile as a surrogate for rates creates an illusion of rapidly decreasing freight charges.

Rail revenues are misleading because they do not account for the increasing level of investment incurred by shippers (e.g., supplying their own railcars). Thus, the full cost of rail transportation is not included in any calculation based upon revenues directly received by railroads. Since 1981, shippers have supplied 77 percent of all new freight cars at a cost nearing $20 billion. Further, short line railroads are taking up much of the slack as the Class I's abandon costly switching and pickup and delivery services.

Railroads have been able to take advantage of other trends that have little to do with railroad efficiency or the Staggers Act, but nonetheless have allowed revenue per ton-mile to fall. For example, average shipment size has increased dramatically - almost tripling for regulated movements. And fuel prices have dropped by two thirds since 1980 -- saving the railroad industry $3.5 billion annually compared with the initial years of deregulation.

Finally, changes in rates or prices are not indicative of the existence, abuse or lack of abuse of monopoly power. In fact, the abuses leading to enactment of the antitrust laws and the Interstate Commerce Act were predominantly associated with discriminatory rate-setting in the midst of generally declining rates.

Introduction

In the recent past, railroad advocates have asserted that rail freight rates have fallen over 50 percent in constant dollars since the passage of the Staggers Rail Act in 1980. Breaking from the concept of a freight rate as the price paid for a package of specific and identifiable services, railroad industry representatives have based their claim on changes in the ratio between industry freight revenue and the rapidly-increasing output measure of railroad revenue ton-miles. That is, the average revenue railroads receive for moving one ton of freight one mile is purported to be an accepted measure of (or surrogate for) railroad rates, unadjusted for whether the commodity moved is coal or electronic equipment, in railroad owned cars or cars provided by shippers, with service windows of an hour or a month, in less-than-carload lots or in train-size shipments.

The conclusion the Railroads wish to be drawn from the statistic "average revenue per ton-mile" is that the Staggers Act has been an unequivocal success for both railroads and shippers, and that no "tampering" with this "formula for success" should be countenanced. In reality, there are several flaws in the chain of reasoning linking the decline in revenue per ton-mile with the sanctity of current government policy. The first link in the AAR's chain is that revenue per ton-mile is a proxy for rail rates. The second link is that declining rail rates (i.e., revenue per ton-mile) are a direct result of the reforms of the Staggers Act, and by association, the diminishment of federal oversight of the railroads attributed to the Staggers Act. The final link is that diminishment of oversight coupled with declining rates proves that railroads have not or will not abuse monopoly power.

Given the importance that has been attached to railroad revenue per ton-mile as an essential element in the railroad industry's argument, the Alliance for Rail Competition (ARC) asked R.L. Banks & Associates, Inc. (RLBA) and Fieldston Company, Inc., (Fieldston) to review revenue per ton-mile measurements. Specifically, our firms were asked to analyze the appropriateness of revenue per ton-mile as a surrogate for railroad freight

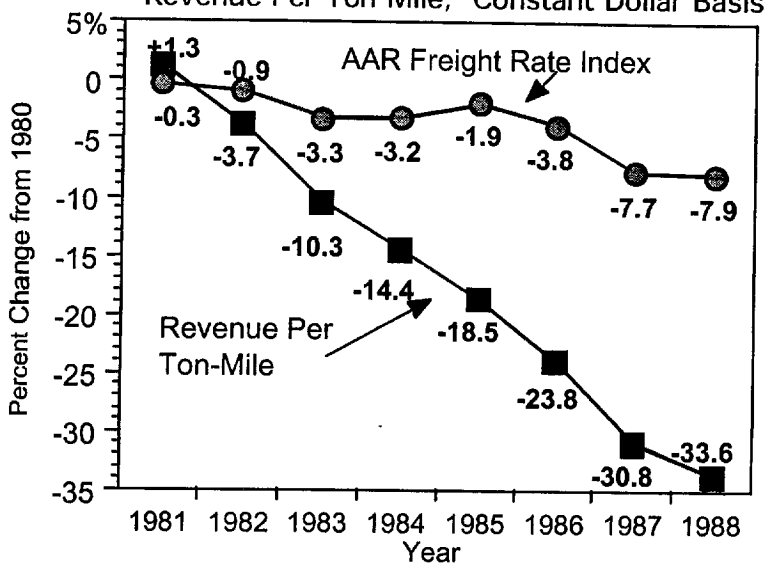
rates. In addition, we were asked to comment on the railroad industry's claim that declining revenue per ton-mile proves the Staggers Act has been an unqualified success for shippers.

Since When Did Revenue Per Ton-mile Become A Rate Surrogate?

Revenue per ton-mile, along with revenue per ton, per car-mile, per car, per employee, per mile of track, etc., etc. are among the conventional hybrid operating/financial ratios employed by the railroad industry almost since its inception. They tend to mean very little standing by themselves, and an understanding of industry trends requires examination of several such measures in conjunction with each other.

Up until the 1988 edition of "Railroad Facts," an annual information booklet published by the Association of American Railroads (AAR), the following caveat appeared in the table of ton-mile revenue: "*...it does not necessarily measure average rate levels because it is affected by composition of traffic and length of haul.*" Through 1988, the AAR also maintained a freight rate index, substantially different from "average revenue per ton-mile." As shown in Figure 1, up until the time the freight rate index was abandoned, the decline as measured by revenue per ton-mile exceeded the decline in rates by greater than a factor of four.

Figure 1
AAR's Abandoned Freight Rate Index vs.
Revenue Per Ton Mile; Constant Dollar Basis



Source: AAR; *Railroad Ten Year Trends 1980 - 1989*

The U.S. Bureau of Labor Statistics continues to measure railroad freight rates. The Railroad Freight Producer Price Index, which "reflects price for shipping a fixed set of commodities under specified and unchanging conditions" increased from 75.3 in 1980 to 111.3 in 1996.[1] This 48 percent *rise* in nominal rates contrasts with an 18 percent *decline* in nominal revenue per ton-mile.

But, in the 1988 edition of *Railroad Facts*, the year the "freight rate index" was terminated, the descriptor on the ton-mile revenue table changed. Since then, for the past ten editions, we have been told: "Revenue per ton-mile is often viewed as a surrogate for railroad rates. While the standard itself does not *precisely* (emphasis added) measure rates..."[2] Interestingly, the AAR's Information and Public Affairs Department, which publishes "Railroad Facts" also released a pamphlet in 1991 which noted: "Another measure of railroad traffic is the ton-mile. Ton-miles hauled increased by ten percent in the 1980s ... but this was a result of changed traffic mix.... Ton-miles can and do increase even though railroads are losing business."[3] If you can lose business while ton-miles rise - obviously, you cannot be in the business of selling ton-miles, and any claim that revenue per ton-mile is the same as a price or a rate is fallacious.[4]

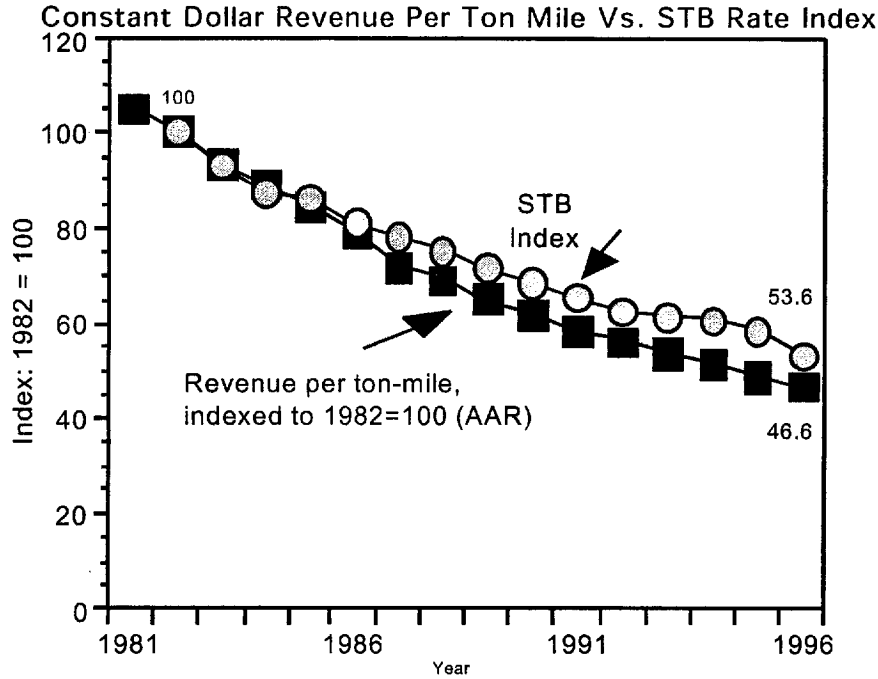
The AAR campaign (described further in endnote 2) is clearly intended to influence public policy makers to embrace revenue per ton-mile as a true measure of railroad freight rates. And, the industry's campaign has paid dividends. With release of the Surface Transportation Board's (STB) latest price index in February of this year, the STB accepted revenue per ton-mile as the government's official measure of railroad rates. The STB states:

"Rate" is defined as gross revenue per ton-mile of freight originated ..." (AAR uses net revenue per ton-mile in its overall index, but only gross revenue is calculable on a commodity-by-commodity basis).

While the footnotes to the STB's report list several problems with the revenue ton-mile measurement, no attempt is made to quantify what impact these known problems might have on the index, other than to apply a slight

modification (a Tornqvist index) to partially account for changes in commodity mix.[5] The similarities between the STB's ultimate findings and those of the AAR are illustrated in Figure 2.

Figure 2



Source: AAR; *Railroad Ten Year Trends*, Various Years,
STB; *Rail Rates Continue Multi-Year Decline*, 1998

Can Deregulation Be Credited With The Decline in Revenue Per Ton-Mile?

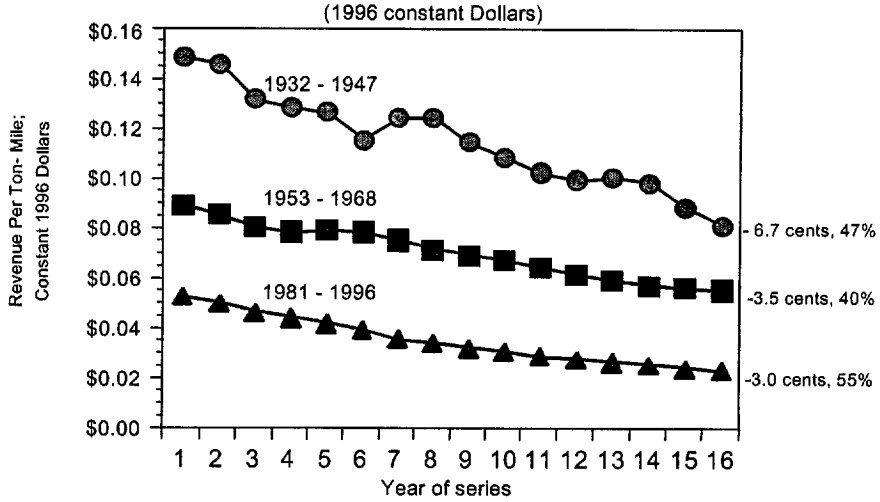
The AAR's argument that "falling rates prove the success of a hands-off policy towards railroads" would enjoy a lot more credibility if the hands-off policy were actually shown to be a principal cause of declining prices. But the AAR, and the STB, in their fervor to show what has happened *since* 1980 never bother to mention what happened *before* 1980. and what happened before 1980 - for over a *century* before 1980 - is that revenue per ton-mile has been falling steadily.

As Figure 3 shows, declining revenue per ton-mile is a trend that was well established decades before Staggers. In the 16 years between 1981 and 1996 revenue per ton-mile (in 1996 dollars) declined 3.0 cents. It declined 3.5 cents in the 16 years up to and including 1968. It declined 6.7 cents in the 16 years up to and including 1947. So, using the AAR logic, we can conclude that the heavy-handed regulation in vogue from the Great Depression through the Second World War was good for shippers because revenue per ton-mile declined. The micromanagement by the ICC and the era of heavily-conditioned mergers was good for shippers because revenue per ton-mile declined through the fifties and sixties. Frank Wilner, formerly of the AAR and the STB, notes in his recent book on railroad mergers that nominal revenue per ton-mile dropped by more than half - from 1.88 cents to 0.73 cents from *1870 to 1900*![6] It is worth mentioning that the trend preceded the passage of the Interstate Commerce Act (1887) - and continued after it. From 1890 to 1900 - after passage - revenue per ton-mile declined 23 percent in nominal terms[7] - versus the eight percent nominal drop in rates as measured by the STB in the corresponding period (three to 13 years) following Staggers.

Figure 3

Changes in Revenue Per Ton-Mile, Three 16-Year Periods

(1996 constant Dollars)



Source: AAR; *Railroad Ten Year Trends*, various years; U.S. Department of Commerce ; *Historical Statistics of the United States*

What the revenue per ton-mile trend really signifies is that, (like many other services and commodities), improvements in technology help the railroad industry to reduce the general price level over time. In addition, just as railroads shifted more freight into unit trains and longer haul markets in the post-Staggers period to lower revenue per ton-mile, the surrender of higher value cargo to trucks over the 1935 to 1980 period is also a factor responsible for lower revenue per ton-mile.

But, whatever the reason, it is clear that declining revenue per ton-mile is not a post Staggers development.[8]

The RLBA-Fieldston Study

RLBA and Fieldston sought to analyze how changes in important railroad parameters such as length of haul, car ownership, shipment size, the use of unit trains, and car investment affect revenue per ton-mile. The STB's Confidential Carload Waybill Sample from 1981, 1986, 1991 and 1996 was used to quantify changes in the make-up of railroad traffic over the post-Staggers period and to determine what impact such changes would have on revenue per ton-mile.

Freight rates, however, represent only part of the cost of shipping by rail. Often left out of the equation are shipper investment and varying levels of service. As the recent Union Pacific operating problems have demonstrated, costs of poor service can be significant. While service level measurements were outside the scope of this inquiry, the AAR's *Analysis of Class I Railroads, Ten Year Trends, Equipment Reports* and other related materials were also used to analyze railroad and shipper freight car investment.

We also compared the revenue per ton-mile metric to other rail freight indices. In doing so, we were able to analyze how revenue per ton-mile based indices compare to alternatives.

Analysis

A Simple Model Reveals Mathematical Illusion

To illustrate what drives the revenue per ton-mile statistic we began our analysis by constructing a simple model of a single railroad operating in only two corridors. As shown in Figure 4, The first corridor has a length of haul of 500 miles and, the second 1500 miles.

Figure 4
"Mathematical Illusion"
How The Same Rate Can Produce Lower Revenue Per Ton-Mile

	Length Of Haul		Weighted
	500	1500	Average
Period 1			
Tons	1000	1000	
$/Ton	$22.60	$33.75	
Revenues	$22,600	$33,750	
Ton-Miles	500,000	1,500,000	
Cents/Ton-Mile	4.52	2.25	2.82
Period 2			
Tons	1000	3000	
$/Ton	$22.60	$33.75	
Revenues	$22,600	$101,250	
Ton-Miles	500,000	4,500,000	
Cents/Ton-Mile	4.52	2.25	2.48

In Period One our railroad moves 1000 tons of cargo in two markets, one 500 miles long, and the other a length of 1500 miles long. The freight rate in the 500 mile corridor is $22.60 per ton, while a rate of $33.75 is charged in the 1500 mile corridor. As Figure 4 shows, the revenue per ton-mile in the 500 mile corridor is 4.52 cents, while in the 1500 mile corridor it's only 2.25 cents. Average revenue per ton-mile for the railroad is 2.82 cents.

Now let us move onto Period Two. In the latter period railroad freight rates remain unchanged - $22.60 per ton in the 500 mile corridor and $33.75 in the 1500 miles market.

But while the amount of freight in the shorter 500 mile corridor remains unchanged, the railroad enjoys an explosion in longer haul traffic lane. Shipments in the 1500 miles market increase to 3000 tons. Revenue per ton-mile in individual corridors does not change. However, average revenue per ton-mile for our hypothetical railroad plummets 12 percent from 2.82 to 2.48 cents because of the heavier share of longer haul traffic.

Has the shipper enjoyed a reduction in freight rates? In this case the answer is no! But, if they were measured by revenue per ton-mile, rates would appear to have decreased. The "rate" reduction, in this case, is a simple mathematical illusion. By growing that segment of business that has lower revenue per ton-mile more quickly than the shorter-haul, higher revenue per ton-mile traffic, average revenue per ton-mile declines despite the fact that real rates did not change.

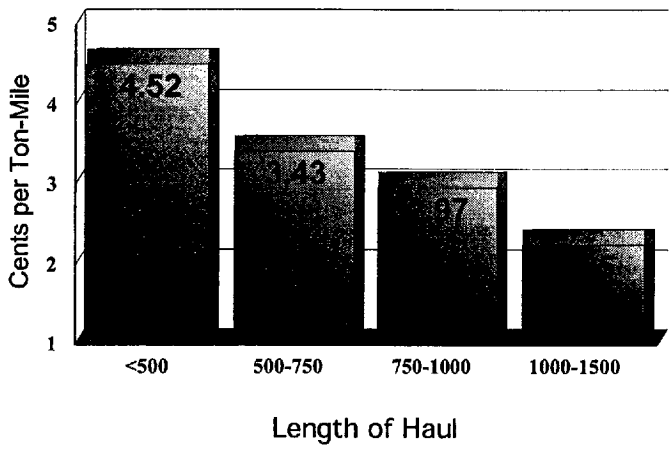
Changing Traffic Mix Affects Revenue Per Ton-Mile: Length of Haul

Of course, any model is accurate only to the extent that it reflects real world data. Did actual railroad traffic grow in such a way that revenue per ton-mile could have fallen without any real change in rates? To answer this question we began by analyzing railroad growth by length of haul.

Figure 5 shows actual revenue per ton-mile estimates derived from the STB's 1996 Carload Waybill Sample. Revenue per ton-mile is lower in longer haul markets than it is at shorter lengths of haul. In the four mileage blocks shown, revenue per ton-mile in 1996 was 4.52 cents for movements less than 500 miles, but dropped to only 3.43 cents for freight moved 500 to 750 miles. Between 1000 and 1500 miles revenue per ton-mile is a mere 2.25 cents.

The phenomenon of lower revenue per ton-mile in longer length markets is not a recent development. The same pattern was found in all years analyzed and was consistent across commodity groups.

Figure 5
Cents/Ton-Mile by Length of Haul
1996



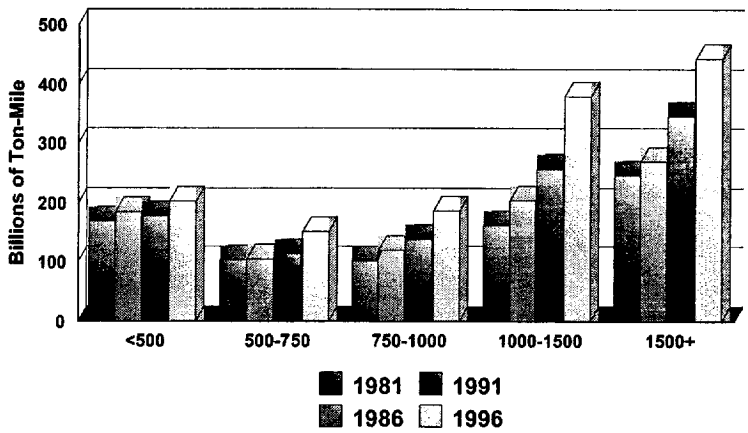
Source: 1996 Carload Waybill Sample, all traffic.

But, the length of haul patterns are important only if growth was uneven among the mileage blocks during the post Staggers period. If railroad traffic grew faster where length of haul was longer then average revenue per ton-mile would tend to decline – regardless of what was happening to actual shipper freight rates.

In fact, as Figure 6 shows, traffic growth in the post-Staggers period was, in fact, very uneven. Short haul traffic, as measured in ton-miles in the less than 500 mile corridors, grew by less than 20 percent over the 1981 – 1996 period, a mere one percent per year. Alternatively, ton-miles generated by shipments traveling 500 to 750 miles, grew by a more respectable 2.4 percent per year (46 percent over the entire period). However, it is in corridors with movements 750 miles or more that the railroad industry saw its most robust growth. On movements between 750 and 1000 miles railroad ton-miles grew by 85 percent or 4.2 percent per year. And, ton-miles grew by an astounding 5.8 percent per year on movements between 1000 and 1500 miles - ton-miles nearly tripled in this mileage block, from

110 billion in 1981 to 308 billion in 1996. Growth for movements traveling more than 1500 miles was also a strong four percent per annum.

Figure 6
Ton-Mile Growth by Length of Haul



Source: 1981, 86, 91, 96 Carload Waybill Sample

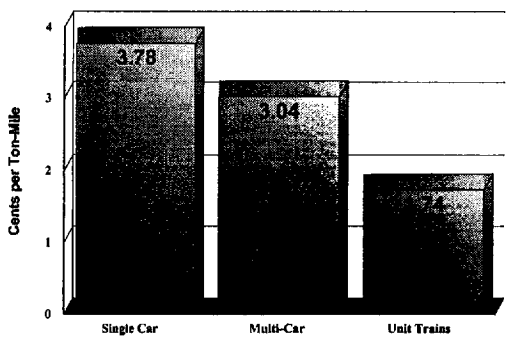
The inevitable conclusion from this analysis, then, is that railroad traffic growth was very uneven in the post-Staggers period. Growth was strongest in those long-haul corridors that have historically had lower revenue per ton-mile – markets that would tend to drive down revenue per ton-mile measurements regardless of what happened to actual freight rates. (From 1981 to 1996, average length of haul for all Class I freight increased 34 percent, from 627 to 842 miles. Typical was coal, the largest single commodity in terms of revenue and tonnage, which experienced an average haul increase of 30 percent to 635 miles over this period.)[9]

Changing Movement Traffic Mix Affects Revenue Per Ton-Mile: Unit Trains

While the impact of length of haul on revenue per ton-mile can be substantial, it is not the only important characteristic of rail traffic. Having analyzed the impact of changing rail freight characteristics on the revenue per ton-mile metric, we find that revenue per ton-mile is also driven by an additional complex set of factors which can, in combination, produce reductions in revenue per ton-mile even when the freight rate structure is otherwise unchanged. Shippers able to take advantage of unit train economies are able to reduce their overall freight bill. Of course, for the shipper there are other costs involved. He must have the capacity to move unit train quantities. And, he often must invest in extra storage facilities, more track to accommodate the longer trains and, in some cases special loading/unloading equipment and associated "loop tracks" in order for the unit train to remain in motion during the load/unload process.

Naturally, the revenue per ton-mile on unit train shipments tends to be lower (than on single or multi-car movements) because the railroad cost of providing that service is so much lower. As Figure 7 shows, in 1996 average revenue per ton-mile for single car shipments was 3.78 cents and multi-car shipments 3.04 cents. For unit train movements, however, revenue per ton-mile plummets to only 1.74 cents.

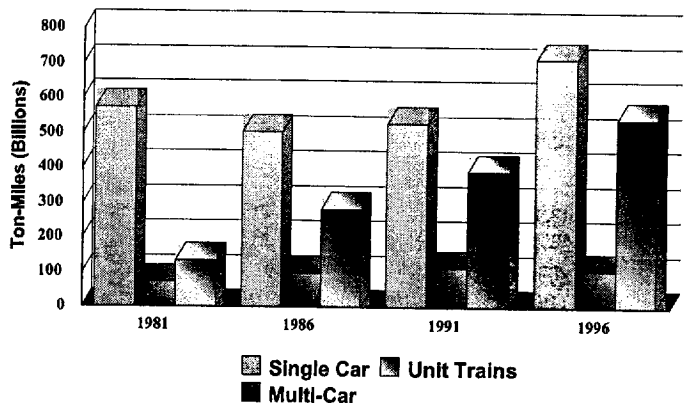
Figure 7
Cents/Ton-Mile for Single, Multi-Car and Unit Trains



Source: 1996 Carload Waybill Sample

So, over the post-Staggers period did railroad traffic grow evenly across all three shipment types? Or was growth concentrated in one particular movement type? As Figure 8 shows, while single car movements grew at only one percent per year, and multi-car movements less than three percent, unit train growth was phenomenal. Unit train ton-miles grew by nearly 10 percent each year – quadrupling in the post Staggers era.

Figure 8
Ton-Mile Growth for Single, Multi-Car and Unit Trains



Source: 1981, 86, 91, 96 Carload Waybill Sample

As was the case with length of haul, the increased use of unit trains changed the composition of railroad traffic in such a way that revenue per ton-mile would have gone down regardless of what happened to real rail freight rates.

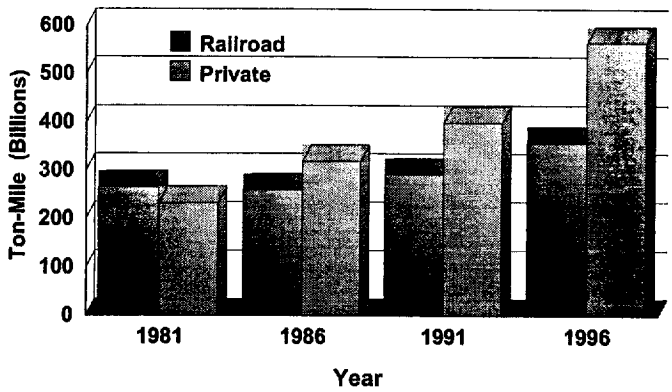
Changing Traffic Mix Affects Revenue Per Ton-Mile: Private Car Ownership

One final characteristic of the railroad traffic mix that we analyzed was the use of privately owned rail cars. As one might expect, if shippers supply their own cars, railroad freight rates are lower. In fact, for regulated rail

shipments revenue per ton-mile is 2.62 cents for movements in rail owned cars, but only 2.27 cents for shipper owned cars.

As Figure 9 demonstrates, ton-miles generated by privately owned cars grew far more quickly than ton-miles in railroad owned cars. When regulated rail movements are considered the average annual growth rate for shipments in

Figure 9
Ton-Mile Growth Railroad vs. Private Cars



Source: 1981-96 Carload Waybill Samples; Non-Exempt Traffic

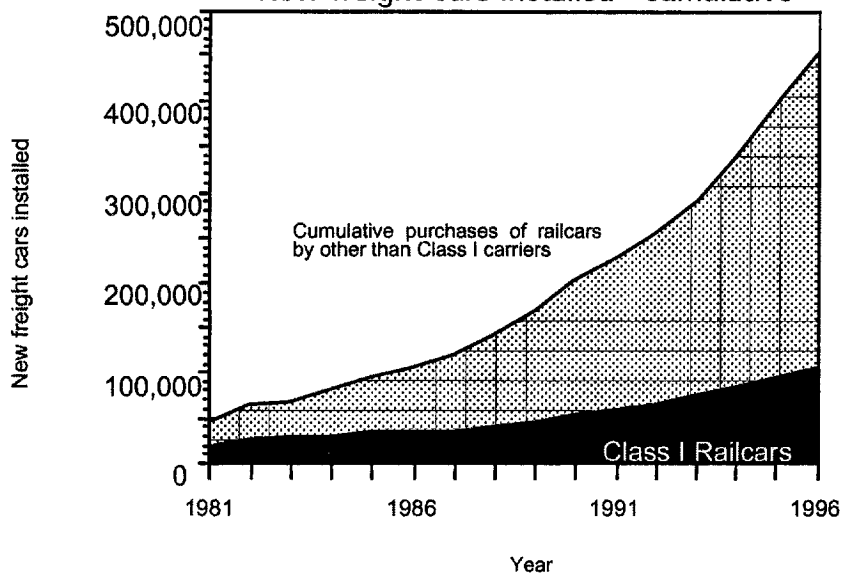
privately owned cars was six percent, compared to only two percent for railroad owned equipment.

Rail revenues don't tell the whole story, however. The shift from rail owned to privately owned equipment, would have caused a decline in revenue per ton-mile even in the absence of any real change in freight charges. To own railroad cars, shippers must invest their own money. In the next section we analyze the magnitude of shipper investment.

The Effect Of Increased Shipper Investment in Rail Cars On Revenue Per Ton-Mile

In 1980, the vast majority of rail freight cars were owned by the Class I railroads themselves. Today, by contrast, these Class I's own only a minority of freight cars; private car companies and shippers have assumed the major burden of financing railroad rolling stock. Figure 10 displays how, since the passage of Staggers, Class I railroads have acquired barely 100,000 of the total of nearly 500,000 new freight cars installed in the national rail system.

Figure 10
New freight cars installed - cumulative

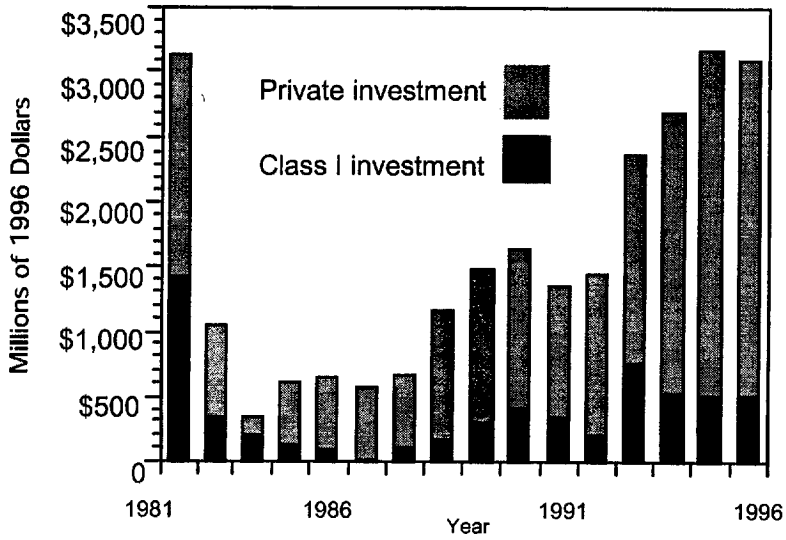


Source: AAR; *Analysis of Class I Railroads* 1981 through 1996.

Gross private investment in railcars has totaled some $20 billion dollars in 1996 dollars since the passage of the Staggers Act, about three times that of the Class I railroads. Figure 11 on the following page illustrates the relative shares of gross investment in freight cars on an annual basis by Class I carriers and private investors.

New (post-Staggers) private net investment in railcars, after depreciation, equals some $15 billion - equal to one-fourth of the entire net investment base of the Class I railroad industry. Net investment by the Class I railroads, over the same period, equals a stunning *negative* five billion (1996 constant) dollars. Despite this surge of private investment, railroads are paying *less* in equipment rents to private car owners now than they were in 1980. The average rental paid for private and car companies cars now covers only about four percent of the capital costs of the equipment - with *nothing* applied to other ownership costs. Were railroads to pay the fair value of their use of private equipment, their costs would rise by over $2 billion annually - a significant percentage of total costs which would otherwise have to be recaptured with higher "revenue per ton-mile" charges.[10]

Figure 11
Class I Railroad versus Private Investment in Railcars



Source: AAR; *Ten Year Trends, Equipment Reports, Railroad Facts*; various years

Other distortions caused by reliance on "revenue per ton-mile" as a rate

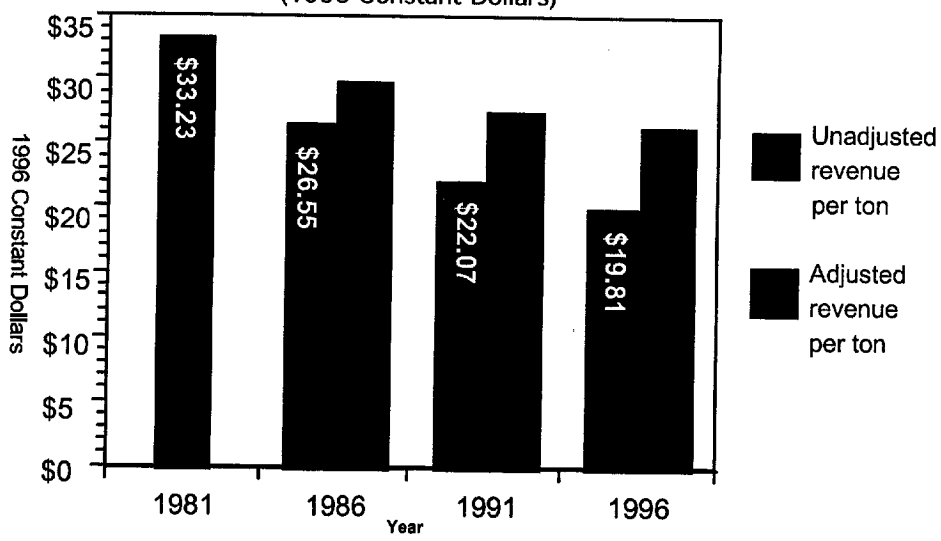
The AAR claims respecting revenue per ton mile ignore several other factors which have accentuated the decline in that statistic for which the railroads

can not properly take credit or which merely represent hidden costs to shippers.

First: the "base year" from which the decline is claimed to have occurred - be it 1980, 1981, or 1982, were peak years in the cost of a principal railroad input factor: fuel. In fact, 1981, in the midst of the second oil embargo, such costs were the highest ever experienced during the diesel-burning era. In that year, fuel costs were nearly three times what they are now - a substantial part of the decline in revenue per ton-mile really only reflects the high rates then in place Were 1996 fuel costs per gallon at the same level as they were in 1981, Class I fuel expenditures would have been $3 1/2 billion per year more than they actually were - over 11 percent of total costs.

Second: there has been a change in the commodity mix carried by railroads since 1980. The STB's own "rate index" study implicitly indicates that this now accounts for $5 billion in "savings" to the railroads annually.[11] Figure 12 compares actual revenue per ton with what revenue per ton would be if Class I railroads had to absorb the costs of shipper car investment, did not experience changes in commodity mix, and were not blessed with decreases in fuel costs since Staggers. (These three factors alone had a total impact on Class I operating costs of $10.5 billion per year as of 1996)

Figure 12
Adjusted and Unadjusted Revenue Per Ton
(1996 Constant Dollars)



Source: AAR; Analysis of Class I Railroads, various years; STB; RLBA analysis

If, today, railroads had to supply the same share of railcars as in 1981, pay the same price for fuel, serve the same traffic - the average rail freight charge per ton would be $26.27 - six and a half dollars higher than actually recorded for 1996.

Continuing our list, other factors include:

Third: Shipper investment in loading and unloading facilities, loop tracks, the costs of trucking greater distances to larger consolidation facilities, etc.

Fourth: "Off the books" costs representing functions shifted to smaller railroads. The number of Class II and III railroads, and their activity compared with the large Class I carriers, has escalated rapidly since 1980. The high cost operations of pickup, delivery and other local switching has been foisted off to small carriers at a tremendous rate as has the cost associated with maintenance of low-density trackage. Today, these carriers operate some 50,000 miles of track - about one-third the Class I total. In constant 1996 dollars, revenues of smaller carriers have increased by approximately $3 billion annually - an increase in rail revenues going to small carriers which doesn't show up in the AAR's graphic of purportedly declining rates.

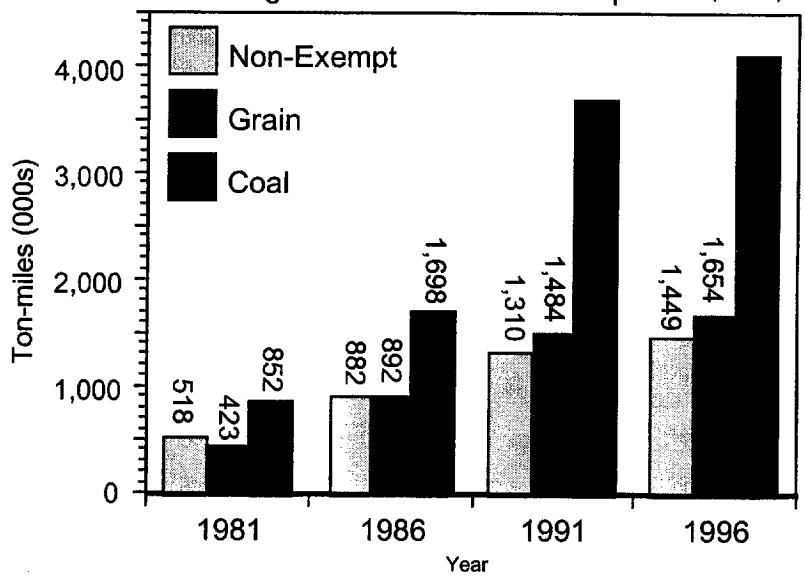
Fifth: There has been a continuation of long-term trends involving the shift of railroad traffic from the relatively costly Eastern district to the less costly Western district. Eastern carriers share of revenue ton-miles declined from 39.9 percent in 1981 to 30.5 percent in 1996. As 1996 gross revenue per ton mile in the East was 63.5 percent higher than that in the West (3.47 cents versus 2.12 cents), retention of share would have generated an

additional 5.0 percent in freight revenues - some $1.72 billion. Average gross freight revenue per ton-mile would have increased by a like percentage, to 2.66 cents from the actual 2.53 cents in 1996.

Sixth: The railroads are selling in volume -- shifting from retail to wholesale: they're selling product in bigger boxes. As shown in Figure 13, average shipment size measured in ton-miles has tripled, from about 500 thousand to 1 1/2 million revenue ton-miles per shipment. Shipment size has quintupled for coal to 4.1 million revenue ton-miles per shipment. With bulk purchases, whatever the product, there is an expectation of lower unit prices because not only are the seller's costs reduced, but less is being sold in terms of convenience or service. Higher inventory costs are being exchanged for lower purchase prices or lower "revenue per ton-mile."

Figure 13

Average Ton-Miles Per Rail Shipment (000s)



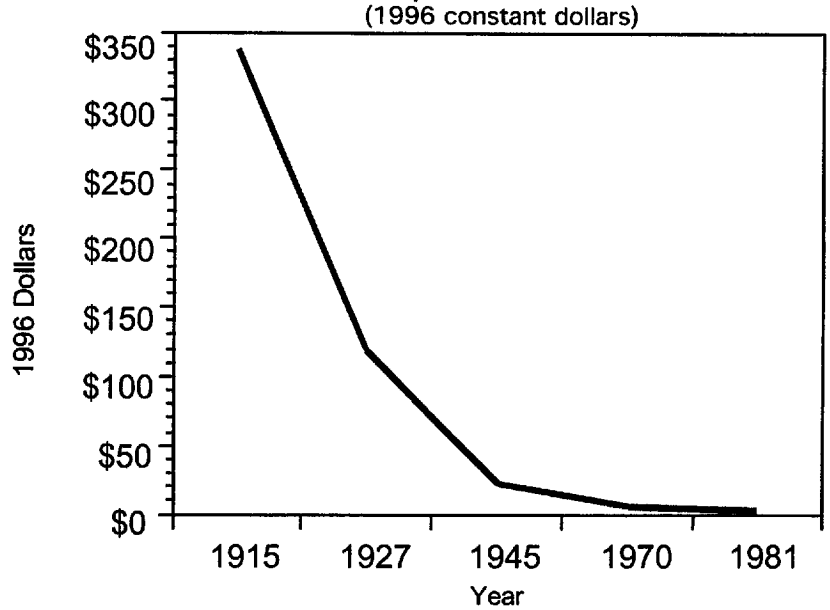
Source: STB Waybill Sample

And Finally: Since When did Declining Rates Prove that Monopoly Power Wasn't Being Abused?

The argument that falling rates is indicative of a competitive industry is a favorite red-herring of monopolists under siege.[12] But as shown in Figure 14, AT&T had reduced domestic long-distance rates by over 99 percent in the decades preceding its breakup in the early 1980s; the Justice Department is now investigating both Microsoft and Intel, despite the fact that prices of the latter's principal products have dropped 20 to 50 percent per year since the 1970s. As noted earlier, the Interstate Commerce Act was enacted in response to railroad abuses occurring in the midst of widespread price-cutting. The price of oil has fallen 70 percent since the passage of Staggers, but few would contend that OPEC operates in an open and free market. It is not how prices change, but how and for what purpose they are set that determines whether monopoly power is being abused.

Figure 14

Cost of 3-minute phone call, NY-San Francisco
(1996 constant dollars)



Source: U.S. Department of Commerce; *Historical Statistics of The United States; Statistical Abstract of the United States 1982-83*

One of the most basic principles of economics is that prices tend to be set at profit-maximizing levels -- irrespective of whether a producer operates in a monopolistic or competitive environment. The more competitive the market, the less opportunity there is to discriminate between customers or to set prices above marginal costs. But this tells us nothing as to how prices would move over time. If a monopolist sets its prices to maximize profit, why would it be expected to continually raise its prices, which would reduce sales and reduce profit? The direction of pricing is not relevant.

Endnotes

[1] U.S. Department of Commerce; *Statistical Abstract of the United States,* 1987, Table 1042.

[2] *Railroad Facts* is not the only vehicle the AAR uses to promote revenue per ton-mile as a freight rate surrogate. The AAR has prominently emphasized the revenue per ton-mile measurement in the public policy arena (including before the STB's Shipper Advisory council) as well.

The AAR's Web site is littered with references to declining revenue per ton-mile measurements. However, between *Railroad Facts* and rail industry position papers the "surrogate" moniker disappears and revenue per ton-mile is foisted off as the real thing. For example, the AAR's white paper, *The Staggers Rail Act: A Boon to Safety and Efficiency* states, "Average rail rates have fallen more than 50 percent on an inflation adjusted basis since 1980." Or, in *Forced Access – Reregulation By a New Name,* the AAR similarly states, "Rail rates have fallen by more than 50 percent on an inflation-adjusted basis, with average rates declining for all major commodity groups ..."

And, as recently as March 31of this year, James Hagen, the interim AAR president, in testimony before the Senate Committee on Commerce, Science and Transportation reiterated the AAR revenue per ton-mile mantra when he stated:

"*The statistics bear repeating: rail rates, as measured by revenue per ton-mile and adjusted for inflation, have decreased 56% since 1981.*"

[3] Frank Wilner: *Railroads and Productivity: a Matter of Survival;* AAR, 1991, p.9 fn.21.

[4] The defects of the use of ton-miles have long been recognized in the railroad industry. In 1981 Patrick J. Krick, as a Senior Economic analyst for the Union Pacific (currently a principal witness for Norfolk Southern in the

Conrail acquisition proceeding) noted: "...the ton-mile has been widely criticized for its poor performance in a variety of applications in the transportation industry. Inappropriate applications of the unit with regard to productivity analysis, fuel usage, and transportation industry output have been pointed out in several publications....

The use of the ton-mile to compare output over time, or between carriers even within the same transportation mode is inappropriate as long as the commodity mix, service characteristics, and other factors are not held constant." Patrick J. Krick, *Econometric Alternative to Rail Output Measure and Analysis,* Proceedings of the Transportation Research Forum, 1981, p. 501.

See also: The National Commission on Productivity and The Council of Economic Advisers; *Improving Railroad Productivity; Final report of the Task force on Railroad Productivity,* Washington, 1973 p. 74ff; George W. Wilson, *Essays on Some Unsettled Questions in the Economics of Transportation,* Indiana University, 1962 p.14 ff.; Allen C. Flott, et al., "*The Ton-Mile: does it Properly Measure Transportation Output?*" Transportation Research Record 577 (1976)

[5] There are some head-turning discrepancies between the AAR's and the STB's estimation of revenue per ton-mile for certain commodities and for certain years. For example, nominal revenue per ton-mile for metallic ores, according to the AAR, dropped eight percent from 1983 to 1984, a year the STB found that the rate increased by 31 percent. Two years later, when the AAR found the rate unchanged, the STB concluded that it had dropped by 11 percent. The STB's initial year estimates for revenue per ton-mile for pulp and paper was 34 percent higher than the AAR's, and its coal estimate for 1996 six percent lower than the trade association's estimates - purportedly while using the same base data. See AAR Trends, 1980-1989, 1987-1996, and STB Rail Price Index analysis, February 1998.

[6] Frank N. Wilner; *Railroad Mergers, History, Analysis Insight* Simmons-Boardman Omaha, 1997 p.12.

[7] U.S. Department of Commerce, *Historical Statistics of the United States,* Washington, 1975, p.733.

[8] The real reasons behind declining revenue per ton-mile have much more to do with the economics of basic industries than with regulation or the lack thereof. Industries which are most easily able to substitute capital for labor; such as mining, chemicals, agriculture and other (often rail-dependent) sectors tend to have constantly lowering prices when measured against general indicators of inflation. Thus, while the entertainment industries, health, law, restaurants, etc. experience price increases above general inflation, most rail-dependent shippers face a persistent trend of lower prices offered for their goods. Declining rail revenue per ton-mile is not an indication that rail rates as a proportion of delivered prices necessarily decline at all. In fact, average railroad revenue per ton of coal has risen dramatically (as a percent of the value of coal F.O.B. minemouth) since the passage of Staggers - from 35 to 44 percent.

Between 1980 and 1996, while general inflation was 83 percent, inflation in the chemicals industries was 24 percent below the national average. Nonmetallic minerals inflation was less than half the overall rate. Agricultural production was one fourth the national average. Metal mining experienced seven percent deflation, and bituminous coal mining -- 26 percent deflation.

[9] Average Haul for all freight from AAR's *Analysis of Class I Railroads*; Coal length of haul from Waybill Sample.

[10] Among the unquantified benefits flowing to Class I railroads from their use of "other people's" money in freight car investment is the reduction in operating costs occasioned by the use of higher capacity cars. Average car capacity (excluding intermodal equipment) has increased by nearly 15 percent since Staggers, reducing costs by almost as much. Virtually all of

the investment underlying the efficiency gains so created come from shippers, not railroads.

[11] The $5 billion estimate is based on the difference between the change in freight revenue per ton-mile and the indexed change calculated by the STB which purportedly accounts for changes in commodity mix.

[12] See, for example, Ron Chernow "*How to Stay a Titan*" (New York Times Op-Ed, April 19, 1998.) Mr. Chernow, a biographer of John D. Rockefeller Sr., in discussing Microsoft, noted: "Mr. Gates...stoutly denies that Microsoft is a monopoly because it has lowered prices and improved products. Yet falling prices...and constant upgrades...don't really acquit him of being a monopolist;....Many people assume that the trust kings of the Gilded Age simply gouged consumers and sold shoddy products. But Rockefeller boasted that Standard Oil lowered retail kerosene prices to 7.5 cents per gallon from 23.5 cents... Rockefeller never construes his monopoly as an unlimited license to mint money. [he] set prices high enough to guarantee substantial profits but never so high as to lure competitors back into the field. And he refrained form achieving a 100 percent monopoly; later confessing that he allowed a few dozen refiners to eke out a meager existence so he could cite competition in the industry." One could speculate that the AAR's substitution for a table of railroad consolidations in the front of its *Ten Year Trends* publication with a table of Class II and II railroads formed out of unprofitable portions of Class I's is intended to serve the same purpose - creating the perception of competition where none exists.